8200

explore the art



Instruction Manual

IMPORTANT SAFETY INSTRUCTIONS

Your Elna 8200 embroidery sewing machine is designed and constructed for HOUSEHOLD use only. Read all instructions before using this machine.

DANGER – To reduce the risk of electric shock:

- 1. Your sewing machine should never be left unattended when plugged in. Always unplug the machine from the electrical outlet immediately after using and before cleaning.
- 2. Always unplug before replacing light bulb. Replace bulb with same type rated 12 Volts, 5 watts.
- 3. Do not reach for the machine if it has fallen into water. Unplug immediately.
- 4. Do not place or store machine where it can fall or be pulled into a tub or sink. Do not place it in or drop it into water or other liquid.

WARNING – To reduce the risk of burns, fire, electrical shock or injury:

- 1. Do not allow machine to be used as a toy. Supervision is necessary when this machine is used by or near children.
- 2. Use this sewing machine only for its intended use as described in this manual. Only use attachments recommended by the manufacturer as described in this manual.
- 3. Never operate this machine if it has a damaged cord or plug, is not working properly, has been dropped or damaged or dropped into water. Return the machine to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
- 4. This machine is equipped with a special connection cord which, if damaged, must be replaced by an identical cord. This can be obtained from your dealer.
- 5. Never operate the sewing machine with any air opening blocked. Keep ventilation openings of the sewing machine and foot control free from the accumulation of lint, dust and fibers.
- 6. Never drop or insert any object into any opening.
- 7. Do not use outdoors.
- 8. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
- 9. To disconnect, turn machine off and remove plug from outlet.
- 10. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- 11. Keep fingers away from all moving parts, especially the needle.
- 12. Always use the proper needle plate. The wrong plate can cause the needle to break.
- 13. Do not use bent needles.
- 14. Do not pull or push fabric while stitching. This may deflect the needle causing it to break.
- 15. Switch the sewing machine off when making any adjustment in the needle area, such as threading needle, changing needle, threading bobbin, etc.
- 16. Always unplug the sewing machine from the electrical outlet when removing covers, lubricating or making any other servicing adjustments mentioned in the instruction manual.

SAVE THESE INSTRUCTIONS IMPORTANT

Be sure to keep machine away from static electricity, heat sources, humidity and direct sunlight.

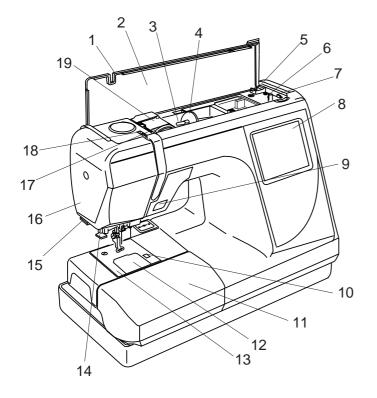
USA only

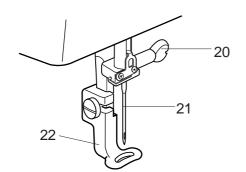
Your machine comes equipped with a polarized plug (one prong wider than the other). A polarized plug reduces the risk of electrical shock. This plug is intended to fit into a polarized outlet. If the plug does not fit fully into the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not modify the plug in any way.

TABLE OF CONTENTS

Machine Parts and Functions	
Part Names	
Standard Accessories	
Extension Table (Storage Box)	
Free Arm	
Presser Foot Lever and Additional Presser Foot Clearance	
Adjusting the Needle Thread Tension	
Getting Ready to Embroider	
Connecting Machine to Power Supply	
Start/Stop Key	
LCD Touch Screen	
Design Selection Window Keys	
Mode Selection Window Keys	
SET Preference Keys	
How to Access On Screen Information	1
Winding a Bobbin	
Inserting the Bobbin	
Threading the Machine	
Built-in Needle Threader	
Drawing Up the Bobbin Thread	
Changing Needles	
Embroidery Hoops	
Stabilizers	
Templates	
Securing Fabric in Hoop	
Attaching Hoop to Carriage	
Embroidering Small Areas	
Sewing Designs	
How to Select a Built-In Design	26-2
Sewing a Single Built-in Design	
Ready to Sew Window After Embroidery Begins	
How to Select Alphabets	30-3 ⁻
Sewing Alphabets	32-33
Alphabet Corrections	34
2 Letter or 3 Letter Monograms	3:
Sewing with PC Design Cards	30
Edit Window	3 ⁻
Selecting a Design After Opening the Edit Window	38-39
Combine a Built-in Design with Alphabet	
Saving a Design in a File	
Opening a Saved File	
Embridery with Optional Free Arm Hoop C	
Taking Care of Your Machine	
Cleaning the Hook Area	Δι
Replacing the Bobbin Case	
Changing the Light Bulb	
Changing the Light Bail	4
DESIGN CHART	
TROUBLESHOOTING	
INDEX	51 54

NOTE: Information found in this instruction manual is current at the time of printing. Elna reserves the right to change and update specifications and information as needed.

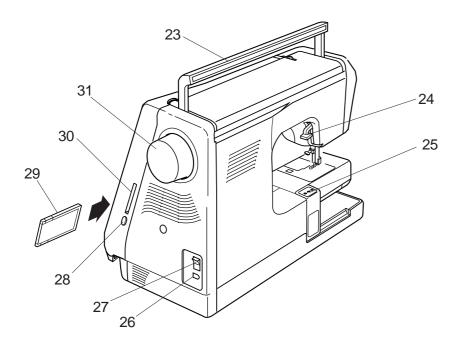


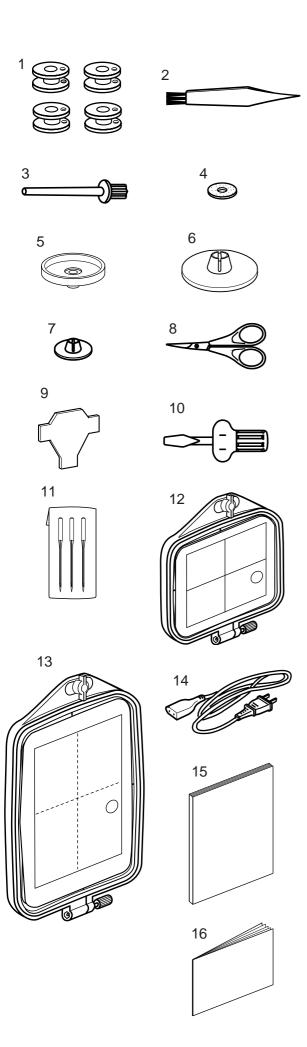


Machine Parts and Functions

Part Names

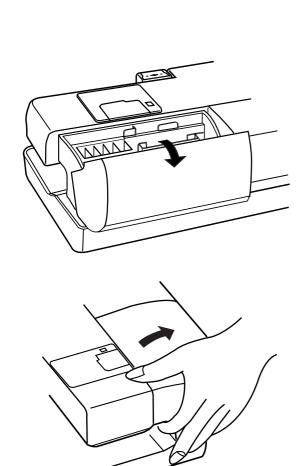
- 1. Top cover
- 2. Design chart
- 3. Spool pin
- 4. Spool holder, large
- 5. Bobbin winder cutter
- 6. Bobbin winder spindle
- 7. Bobbin winder stop
- 8. LCD touch screen
- 9. Start/Stop key
- 10. Bobbin cover plate release button
- 11. Extension table (accessory storage box)
- 12. Bobbin cover plate
- 13. Needle plate
- 14. Built-in needle threader
- 15. Thread cutter and holder
- 16. Face plate
- 17. Thread tension dial
- 18. Thread take-up lever
- 19. Thread guide slit
- 20. Needle clamp screw
- 21. Needle
- 22. Presser foot
- 23. Carrying handle
- 24. Presser foot lever
- 25. Carriage
- 26. Machine socket
- 27. Power switch
- 28. Card eject button
- 29. PC design card (optional)
- 30. PC design card slot
- 31. Flywheel (always turn towards you)

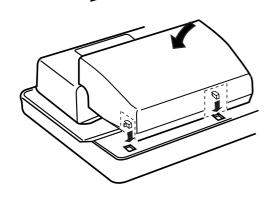


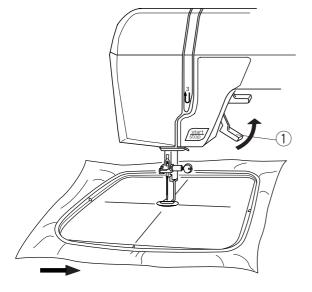


Standard Accessories

- 1. Bobbins
- 2. Lint brush
- 3. Additional spool pin
- 4. Spool pin felt
- 5. Spool stand
- 6. Spool holder (large)
- 7. Spool holder (small)
- 8. Scissors
- 9. Screw key
- 10. Screwdriver
- 11. Set of needles
- 12. Standard hoop A (with template)
- 13. Large hoop B (with template)
- 14. Power supply cord
- 15. Instruction Manual
- 16. Template sheets







Extension Table (Storage Box)

Most accessories are stored inside the extension table.

To Open:

Pull cover towards you. Lift out the packet of accessories.

Ferr Arm

Remove the extension table to access the free arm.

To Remove:

Lift out extension table away from the machine, as shown.

NOTE: Always embroider with the extension table attached unless using optional free arm hoop C. See page 45.

To Attach:

Place tabs over slots and push down on table.

Presser Foot Lever and Additional Presser Foot Clearance

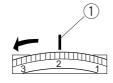
Raise and lower the foot with this lever ①.

Before sewing can occur, the presser foot must be lowered to close the tension discs.

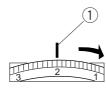
You can raise the presser foot about 6.5 mm (1/4") higher than the normal up position for easier removal of the hoop. Pull the presser foot lever 1 up beyond the normal up position.











Adjusting the Needle Thread Tension

Align the number 2 on the tension dial with the setting mark ①.

Balanced thread tension:

A small portion of needle thread should appear on the underside of the fabric.

When adjusting needle thread tension, the higher numbers tighten, the lower numbers loosen.

Tension is too tight

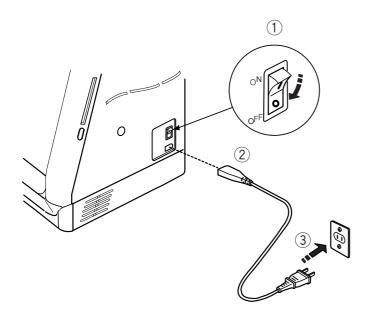
The bobbin thread shows through on the topside of the fabric.

Turn the dial to a lower number to loosen the needle thread tension.

• Tension is too loose

The needle thread forms loops and looks ragged.

Turn the dial to a higher number to tighten the needle thread tension.



Getting Ready to Embroider

Connecting Machine to Power Supply

Machine has an auto voltage system and will automatically adjust to any local power supply voltage between 100 and 240V, 50/60 Hz.

Always use the power supply cord that came with the machine.

To connect machine to power supply, turn off the power switch ①. Insert machine plug ② into the machine and the power supply plug ③ into the wall socket.

Your machine may come equipped with a polarized plug (one prong wider than the other). A polarized plug reduces the risk of electrical shock. This plug is intended to fit into a polarized outlet. If the plug does not fit fully into the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not modify the plug in any way.

For Your Safety

Do not use extension cords or plug adapters.

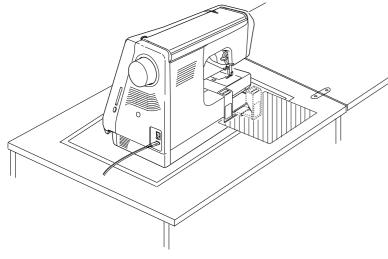
Do not touch plug with wet hands.

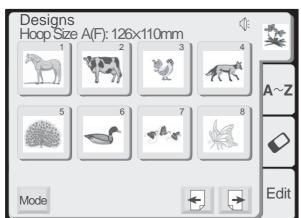
Always turn off the power/light switch first and then unplug from the electrical outlet. Examples:

- · when leaving the machine unattended
- · when cleaning the machine
- when attaching or removing parts such as needle or needle plate

Do not place heavy items on cords. Do not subject cords to heat. Do not use damaged cords. Have the cord repaired immediately.

While the machine is in operation, always keep your eye on the sewing area and do not touch any moving parts such as the thread take-up lever, flywheel or needle.



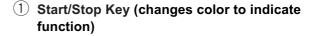




Before turning on your machine, clear your table surface of anything that might obstruct the carriage movement. If your machine is in a cabinet, check that the machine is even or above the cabinet surface. (The carriage could possibly hit the cabinet and disturb the sewing result.)

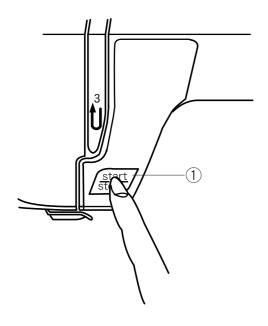
TURN ON THE POWER SWITCH.

NOTE: After turning on the machine there is approximately a six second delay before the LCD Touch Screen becomes visible. (This is the required boot up time and is not a malfunction.)

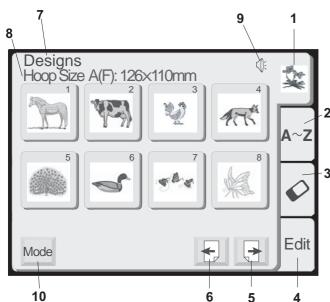


Press this (green) key to start the machine. When the machine is running, press this (red) key to stop machine.

NOTE: The Elna 8200 is equipped with a safety feature that will automatically shut down the machine to prevent overheating if it is running overloaded. Follow the instructions that appear in the LCD touch screen should this occur.







LCD Touch Screen

When the machine is turned on, the design selection window will appear in the LCD touch screen.

NOTE: Only a light touch is required when making a selection on the LCD touch screen. Do not touch the surface of the screen with any hard or sharp object, such as pencils, pens, screwdrivers, etc.

Design Selection Window Keys

1. Built-in designs

There are 58 built-in designs. For an overview, see page 48.

2. Alphabets

Three distinctive fonts – Gothic, Script and Cheltenham. In addition, 2 letter and 3 letter monogramming. See page 30.

3. PC design cards (optional)

Please verify that this machine will accept compact flash card. See page 36.

4 Fdit

This is the window where you can modify and combine designs. See page 37.

2 5. Next key

Touch this key to go forward to next window in sequence.

3 6. Previous key

Touch this key to go back to the previous window in sequence.

7. Window category

Names the window function based on the activated category.

8. Hoop recommendation

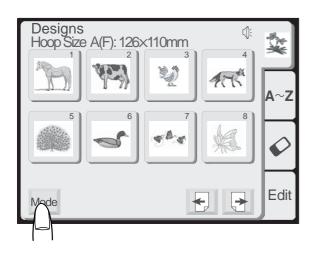
Identifies the appropriate hoop (and shows its dimensions) depending on the designs displayed on the screen. The example shows standard rectangular A hoop and the optional round F hoop.

9. Sound

This symbol indicates the beep sound is on. See page 11.

10. Mode key

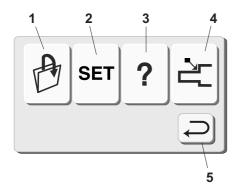
This key opens the mode selection window. See page 10.



Mode Selection Window Keys

The mode key is displayed in the selection window no matter the category: built-in designs, alphabets, PC design cards or edit.

Touch the "Mode" key.



The mode selection window will open.

1. Open file key

Any designs that have been saved can be recalled. See page 44.

2. SET preference key

You can program the machine to change the default settings to reflect your personal sewing style. See page 11.

3. On screen information key

View basic operation information windows. See page 14.

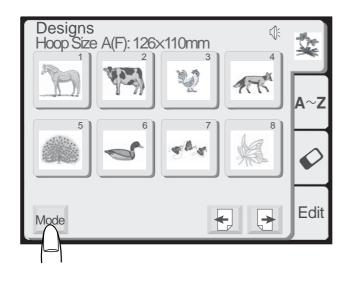
4. Return carriage key

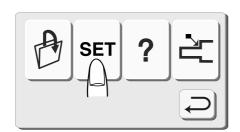
Use this key to bring the carriage back to the store position after completing embroidery.

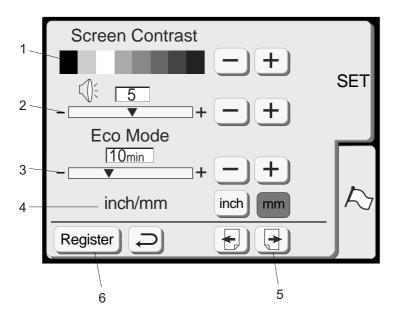
IMPORTANT: Always have the carriage in the stored position before turning OFF the machine.

5. Return key

Use this key to close this window and return to the previous window.







SET Preference Keys

These functions can be set according to your preferences: screen contrast, sound volume, eco mode, inch/mm, adjust key position, set maximum embroidery speed, sewing light, thread selection, format and language.

Touch the "Mode" key.

Touch the "SET" preference key to access and personalize the machine settings.

1. Screen contrast

The LCD touch screen has an adjustable backlight so the contrast can be lightened or darkened. Touch the "+" key to darken and the "-" key to lighten.

2. Sound

The beep volume default setting is 5 but it can be adjusted between 0 (off) and 10 (loud). Touch the "+" key to increase and the "-" key to decrease or turn off.

3. Eco Mode

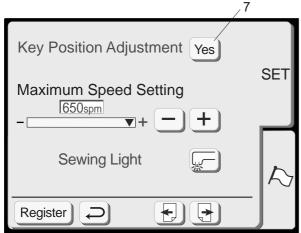
After turning on the machine this energy saving feature will darken the LCD touch screen and turn off the sewing light if the machine has not been used. Simply touch the LCD screen for the screen and light to turn back on. The eco mode default setting is 10 minutes but it can be adjusted between 1 and 30 minutes. Touch the "+" key to increase and the "-" key to decrease. If you want to turn off the eco mode, touch the "+" key until "OFF" appears in the display.

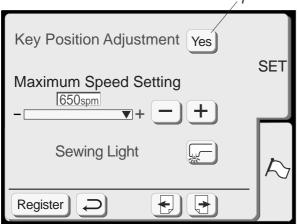
4. Inch/millimeter

Choose to have the measuring unit for designs readout in either inch or millimeters. The default unit setting is millimeters. Touch either the "inch" or "mm" key.

5. Touch the "Next" key.

NOTE: Any change in the set preference window must be "registered" to be activated. Only touch the "Register" key **(6)** after making all changes desired.





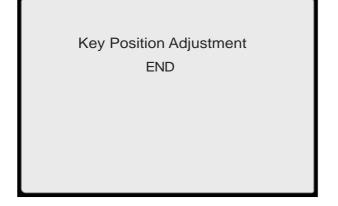
Key Position Adjustment PRESS MARK (+).

7. Adjust key positions

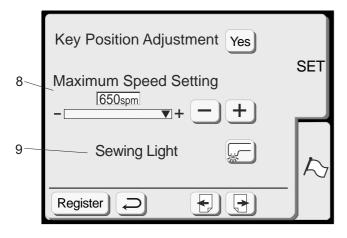
If the touch keys in the LCD touch screen do not react to your touch, the keys may need to be adjusted or realigned.

Touch the "Yes" key to open the key position adjustment window.

The first of five black plus (+) symbols will appear. Touch the black symbols in the order that they appear.



After the fifth black symbol is touched, the END message appears. Wait a few moments and the set preference window reappears.



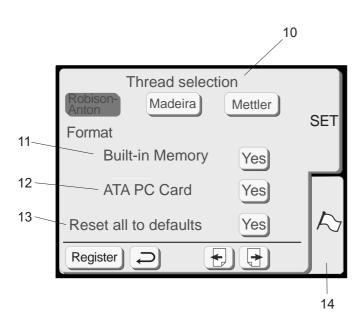
8. Set maximum embroidery speed

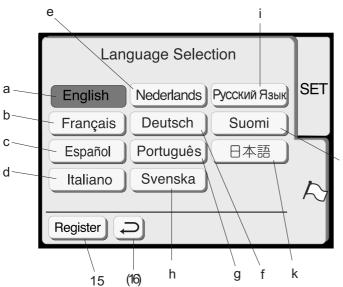
The maximum embroidery speed default setting is 650 spm (stitches per minute). Designs featuring narrow zigzag stitches may need to be sewn at a slower speed for best results. Touch the "-" key to decrease and "+" key to increase.

9. Sewing light

You can operate the machine with the sewing light on or off. Touch this key to change between the two settings.

Touch the "Next" key.





10. Select thread brand

Choose from three popular brands of embroidery thread. The default thread brand is Robinson-Anton®. Touch the key that represents the brand of thread you use most commonly. The color code and name for that brand of thread will be displayed in the LCD screen after selecting a design.

Format

If the built-in memory or PC design card does not function because the memory bank is damaged, you must re-enable by formatting the memory.

NOTE: Formatting will erase all stored data.

11. Built-in memory

Touch "Yes" key next to Built-in memory.

12. PC design card (or Compact Flash)

Touch "Yes" key next to ATA PC card.

13. Reset to factory defaults

Touch this key to return everything, except language, to the default settings (same settings as when you purchased the machine).

14. Language selection

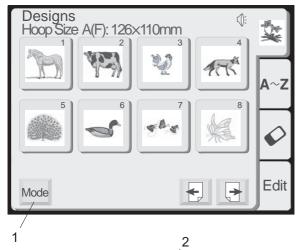
Touch the language key to open the language selection window.

Choose from eleven languages. Touch the key that represents the language you desire.

- a. English
- b. French
- c. Spanish
- d. Italian
- e. Dutch
- f. German
- g. Portuguese
- h. Swedish
- i. Russianj. Finnish
- k. Japanese

15. Register key

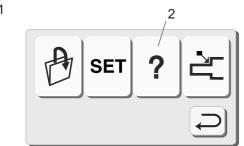
Touch this key to save your personal settings and exit the set preferences window. If you touch the "Return" key (16), you will exit the set preference window but the new setting will not be saved.



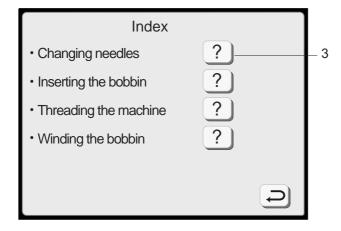
How to Access On Screen Information

The LCD touch screen can show you information for these basic machine operations: changing needles, inserting the bobbin, threading the machine and winding the bobbin.

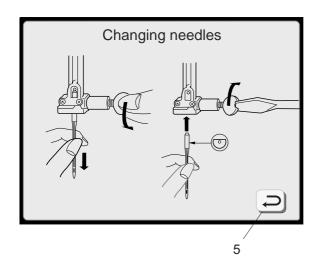
1. Touch the "Mode" key to open the mode selection window.



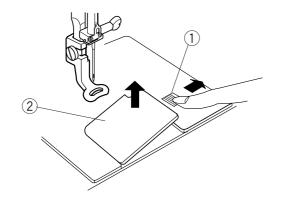
2. Touch the "On Screen Information" key to open the index window.



3. Touch one of the keys in the index window.

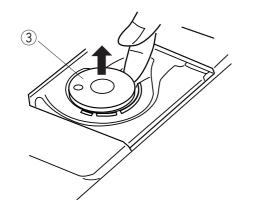


- 4. View the illustrations of the topic selected.
- 5. Touch the "Return" key to go back to the index window. Touch "Return" key again to exit mode selection window.

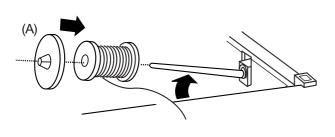


Winding a Bobbin

To remove bobbin, slide bobbin cover plate release button ① to the right and lift away the bobbin cover plate ②.



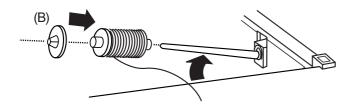
Lift out the bobbin ③. (Always use bobbin type supplied with machine.)



Lift up the spool pin. Place the spool of thread on the spool pin with the thread coming off the spool as shown. Attach the spool holder and press it firmly against the spool of thread.

NOTE: Spool holder needs to be changed according to the type of thread spool

- (A) Large spool
- (B) Small spool

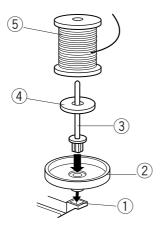


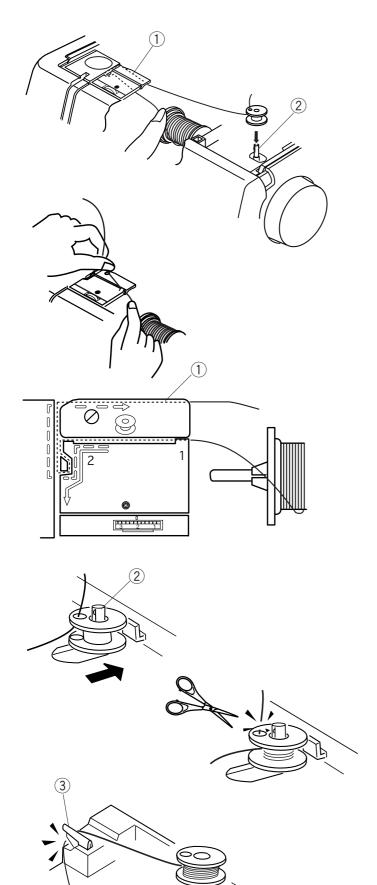
Additional Spool Pin

The additional spool pin can be used to wind a bobbin without unthreading the machine.

PROCEDURE: Insert the spool stand ② and the additional spool pin ③ in the hole ①. Place the felt ④ and spool ⑤ on the pin with the thread coming off the spool as shown.

NOTE: Hole is located in front and to the right of the standard spool pin.





Using both hand, pull thread towards left and insert thread into slit.

Pull the thread (dotted line in illustration) around the thread guides following the broken lines indicated on the machine (1).

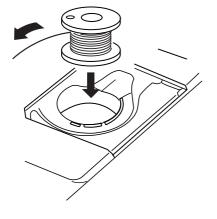
Pass the thread through the hole in the bobbin from inside to the outside. Place the bobbin on the bobbin winder spindle $\widehat{2}$.

Push bobbin winder spindle to the right. (The LCD touch screen will show a bobbin winding message.) Holding the free end of the thread, press the Start/Stop key. Stop machine after the bobbin has made a few turns. Cut the thread tail close to the hole in the bobbin. Start machine again to continue winding bobbin. When the bobbin is fully wound, stop the machine.

Move the spindle to the left to return the bobbin winder to its original position. Remove the bobbin and cut the thread with the bobbin winder cutter ③.

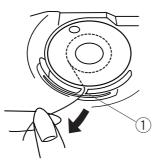
NOTE: Do not move the bobbin winder spindle while the machine is running.

If the machine is running for more than two minutes during bobbin winding, it will automatically stop for safety purposes.

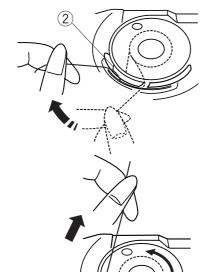


Inserting the Bobbin

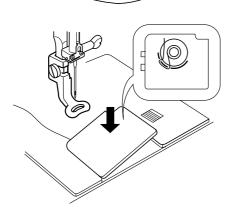
Place the bobbin in the bobbin case with the thread running <u>counterclockwise</u>.



Guide the thread into notch ① on the front side of the bobbin case. Hold the bobbin with your right hand and pull the thread to the left, through the tension spring blades.



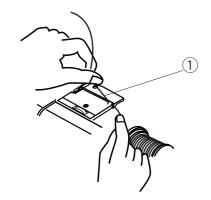
Continue pulling the thread lightly until the thread slips into notch $\widehat{\mathbb{Q}}$.

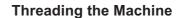


Pull out about 15 cm (6") of thread.

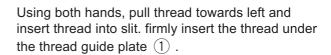
Replace the bobbin cover plate.

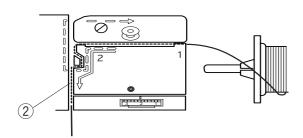
Refer to the chart shown on the bobbin cover plate to check the threading.



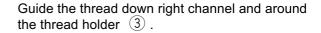


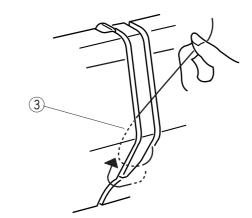
Raise the presser foot with the presser foot lever. Hand turn the flywheel (always turn towards you) to bring the needle up to its highest position.



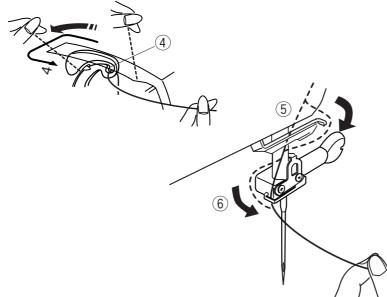


Pull thread foward around guide ②. (Thread pathway is indicated on the machine with solid line.)





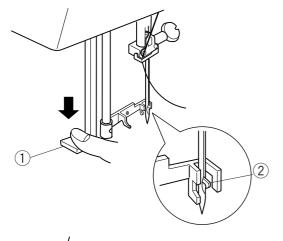
Pull the thread up the left channel to the take-up lever. Firmly pull the thread from right to left, over the take-up lever and down into the take-up lever eye 4.



Proceed down left channel and through the lower thread guide 5.

Slide the thread to the left behind the needle bar thread guide $\widehat{\mathbb{G}}$.

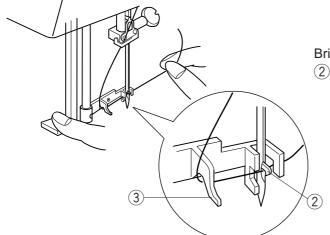
Thread the needle from front to back manually or use the built-in needle threader. See page 19.



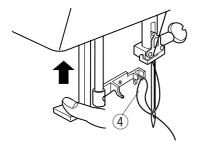
Built-in Needle Threader

Hand turn the flywheel (always turn towards you) to bring the needle up to its highest position. Turn OFF the power switch. Lower the presser foot.

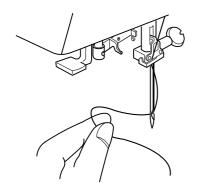
Pull down the needle threader lever ① as far as it will go. Hook ② is automatically inserted into the needle eye.



Bring the thread around guide ③ and under hook ②.



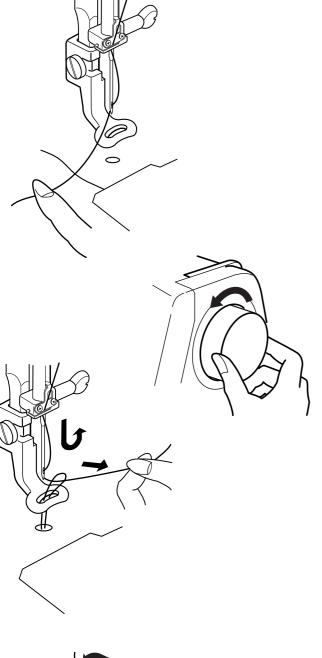
Slowly release the lever while holding the thread end and let the needle threader return to its original position. A loop of thread (4) is pulled through the needle eye.



Pull the thread loop off the guide to the back and manually bring the thread through the needle eye.

NOTE: The needle threader can be used with #11 to #16 size needles. Thread weight may vary from 30 to 90.

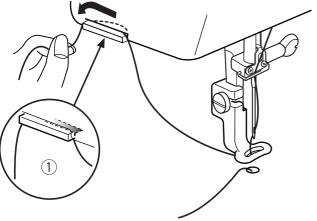
If the needle threader does not catch a thread loop, check the needle and positioning.



Drawing Up the Bobbin Thread

Raise the presser foot and hold the needle thread lightly with your left hand.

Hand turn the flywheel (always turn towards you) one full revolution. Draw up the needle thread together with a loop of bobbin thread.

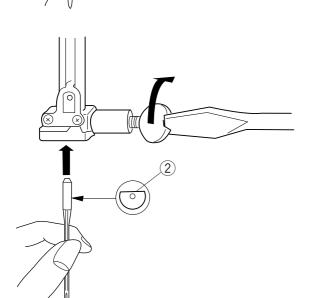


Pass the needle thread through the embroidery foot. Pull thread up and secure it into thread holder (located on front side of thread cutter) ① and leave a small thread tail.

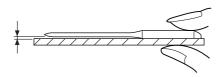


Never use a bent or blunt needle, as it may cause skipped stitches or thread breakage. Defective needles can ruin the fabric. Always purchase good quality needles. Change needles often.

Turn OFF the power switch. Hand turn the flywheel to bring needle up to highest position. Lower the presser foot. Turn the needle clamp screw 1 counterclockwise to loosen. Remove the needle from the clamp.

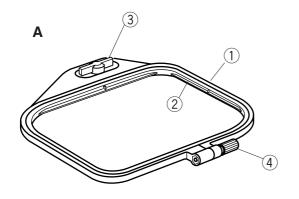


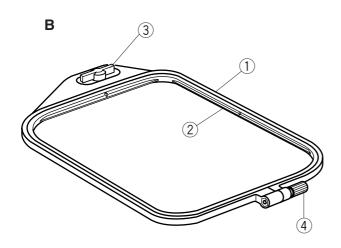
Insert the new needle into needle clamp with the flat side ② to the back, pushing it up as far as it will go. Tighten the clamp screw firmly.

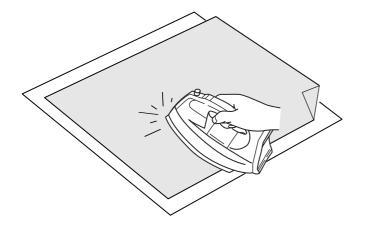


To determine if the needle is defective, place the flat side of the needle on something flat (a needle plate, piece of glass, etc.). The gap between the needle and the flat surface should be consistent.

NOTE: Use a 75/11 needle for fine fabrics and a 90/14 needle for medium to heavyweight fabrics. Your Elna 8200 comes inserted with a 75/11 needle.







Embroidery Hoops

Hoop A

The embroidery area is $126 \text{mm} \times 110 \text{mm}$ (5" x 4 3/8"). Ideal for sewing many of the built-in designs and designs from optional PC design cards.

Hoop B

The embroidery area is 140mm x 200mm (5 1/2" x 8"). Use the generous dimensions of this hoop for large size designs or combine several designs or alphabets into one arrangement.

Hoop Part Names:

- 1 Outer hoop
- 2 Inner hoop
- 3 Hoop turnkey
- 4 Hoop tightening screw

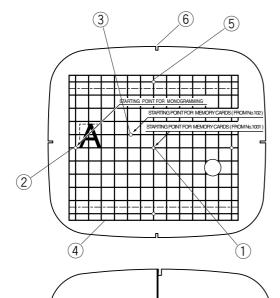
Stabilizers

All embroidery needs some form of stabilizer that can be easily removed. Use a stabilizer appropriate to the fabric and project. Common forms of stabilizer for embroidery sewing are fusible, adhesive, tear-away, heat-away or washaway.

The fusible type is recommended for stretch fabrics and fabrics that might shrink. Adhesive type is great for velvets or other napped fabrics that would be damaged if secured in the hoop. The non adhesive types should be used when embroidering fabric which cannot be ironed or for areas which are difficult to iron.

Most stabilizers should be used on the wrong side of fabric. More than one layer may be required. Wash-away stabilizer may be placed on top of fabrics like toweling so the loops lay flat under the embroidery.

For any type of stabilizer, prepare a piece larger than the embroidery hoop and place it in the hoop so that the entire piece can be fastened within.



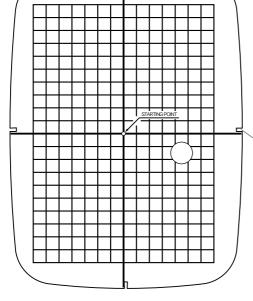


Each hoop comes with a template to help you place your design where you want it on the fabric.

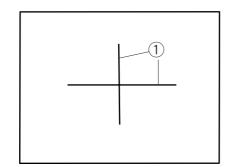
There are a variety of starting points visible on the template. Find the one that is appropriate for your machine/design.

- 1 Starting point for built-in and PC design cards.
- 2 Starting point for alphabets with horizontal placement.
- 3 Starting point for 100 series EnVision card and for Elna EnVision CE20 and 8007.
- 4 Boundary edges for built-in and PC design cards.
- (5) Starting point for alphabets with vertical placement.

NOTE: The four indentations (5) for fitting the template onto the hoop do not correspond with any of the reference lines.

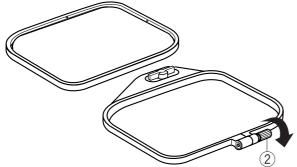


6

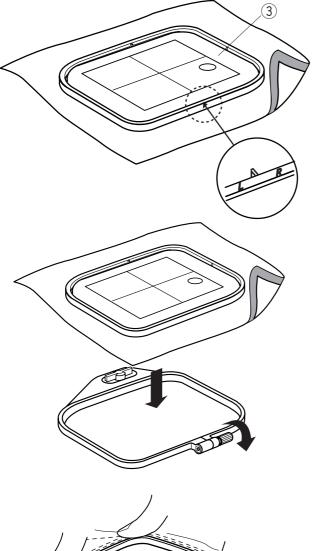


Securing Fabric in Hoop

Use a washable fabric marker or tailor's chalk to draw centerlines 1 on your fabric (see stabilizers on page 22).

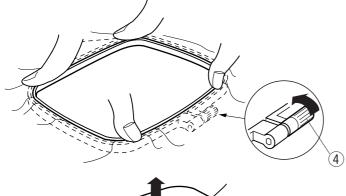


Loosen the hoop tightening screw ② and lift out the inner hoop.

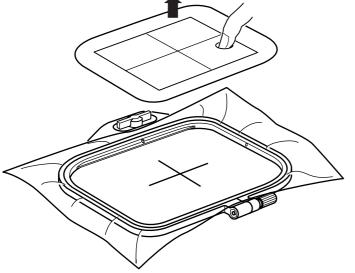


Fit the template ③ into the inner hoop. (L and R markings on the inner hoop should be visible.) Place the inner hoop and template over the fabric, matching the centerlines.

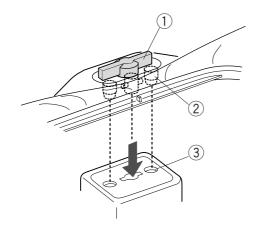
Place the outer hoop on a flat surface. Position inner hoop, template and fabric over the outer hoop.



Set inner hoop into outer hoop and slightly tighten the hoop tightening screw 4. Gently pull fabric taut in hoop, respecting the fabric grain (vertical and horizontal). Check fabric and template centerlines. Once fabric is taut and properly positioned, tighten adjustment screw with screwdriver.

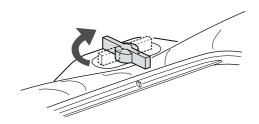


Remove template from inner hoop.

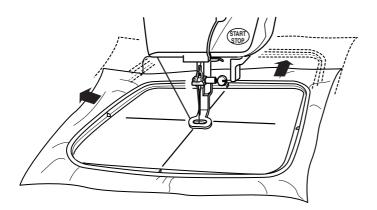


Attaching Hoop to Carriage

Lift up the presser foot. Rotate the hoop turnkey ① so it lies parallel to the hoop. With the hoop turnkey turned towards the back, slide the hoop from left side of machine. Position the hoop pins ② into the holes ③ on the carriage.

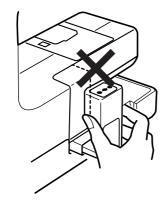


Rotate the hoop turnkey clockwise to lock hoop onto carriage.



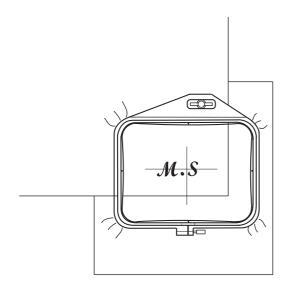
CAUTION:

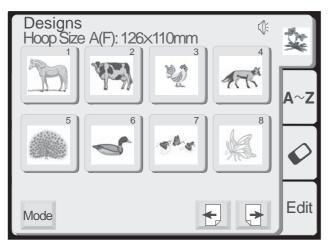
Always allow plenty of room behind the carriage so it can move freely. See page 8.

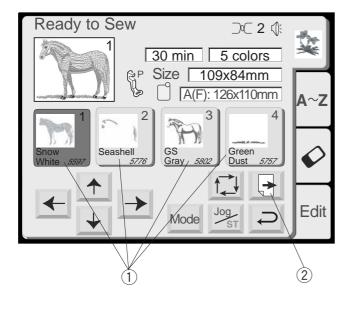


Never try to move the carriage by hand or touch the carriage when it is moving.

Always return the carriage to store position before turning off the machine. See page 10.







Embroidering Small Areas

Attach stabilizer (cut larger than embroidery hoop) to small piece of fabric. Draw centerline and place stabilizer in hoop.

Sewing Designs

How to Select a Built-In Design

The built-in designs have been organized by recommended hoop size (A or B) and subject matter (animals, floral, ocean life, etc.).

To select a design, touch the key that represents the design you desire.

Hoop size warning message appears. Touch "Return" key.

The ready to sew window opens. The LCD touch screen now shows the design information like the image, thread colors, sewing time, etc.

(1) Color/Part key

The design is separated into parts based on thread color changes. The parts are sewn in the order displayed. Thread color names and numbers are shown based on your thread brand preference (see page 13). The part that will be sewn is darkened.

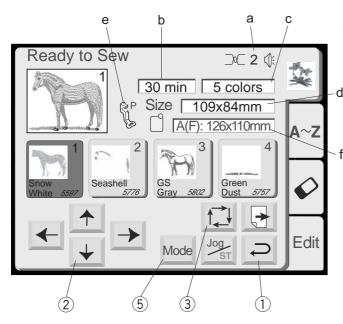
After a part is sewn, the machine will automatically stop and the next color part key will darken. Change thread to next color and continue sewing.

How to Sew a Specific Part (Skipping)

You can eliminate parts of the design by touching the "Color/Part" key previous to the part you wish to sew. All parts located before that color/part key will lighten.

2 Next key

This key will be displayed if there are more parts to the design. Touch the key to view the other parts.



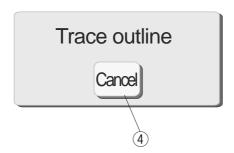
1 Return key

Touch this key to close this window and return to the design selection window.



The needle must be aligned directly above the centerlines on the fabric. Touch these keys to adjust the hoop position.

NOTE: See page 29 for explanation of "Jog/St" key.



3 Trace key

Check the size and sewing area of the design. Touch this key. A message appears and tracing function automatically starts. The carriage traces the outlying boundaries of the design without any stitching.

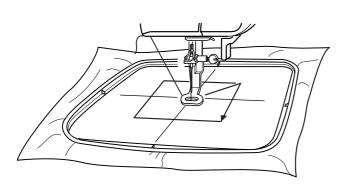
4 Cancel key (within tracing message)

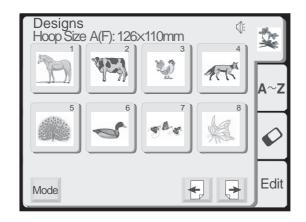
You can cancel the tracing function while it is happening by touching this key.

5 Mode key See page 10.

Sewing Information

- a. Recommended needle thread tension
- b. Sewing time in minutes
- c. Number of colors/parts
- d. Design size
- e. Embroidery foot P
- f. Appropriate hoop and its dimensions





Sewing a Single Built-in Design

Select a design.

Touch "Return" key in the hoop size warning message.



Hoop fabric and attach hoop to carriage. Position needle directly over centerlines on fabric. Thread machine with first thread color. Lower presser foot.

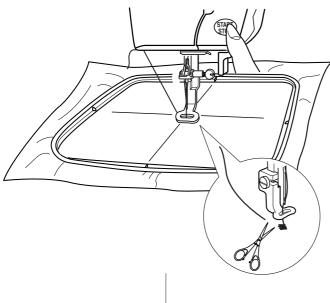
Press "Start/Stop" key and sew 5 or 6 stitches. Stop machine by pressing "Start/Stop" key.

Raise presser foot. Cut away beginning thread tail close to the start point. Lower presser foot.

Press the "Start/Stop" key and let the machine sew until it stops automatically for the thread change.

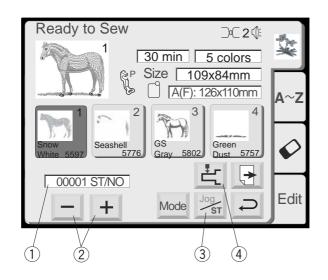
Sew entire design using method described above for each thread change.

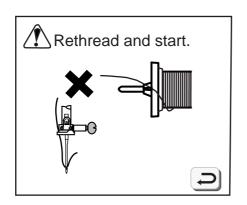
When design is finished, the word "Completed" will appear. Touch the "Return" key.



The design should be aligned with the centerlines on the fabric.

HINT: You can check the design positioning before sewing with the tracing key or template sheets.





Ready to Sew Window After Embroidery Begins

When you start to sew, the ready to sew window will change – jog keys disappear and current stitch count \bigcirc , stitch minus/plus keys and return carriage key appear.

Thread Breaks

If the needle thread breaks, the machine will stop and show a warning message. Touch the "Return" key. Rethread machine.

2 Stitch Minus/Plus keys

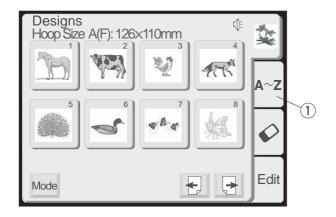
Touch the "–" key to move the hoop back to the point before the thread break occurred. Each time you touch the "–" key the hoop moves back 10 stitches. Each time you touch the "+" key the hoop moves forward 10 stitches.

3 Jog/ST key

Touch this key before sewing – the jog keys disappear and the stitch minus/plus keys appear.

4 Return Carriage key

Since this is a very important key to use before turning off your machine it appears here as well as in the mode selection window (see page 10).



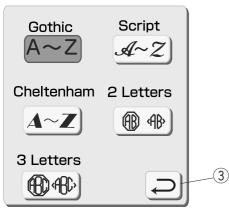
How to Select Alphabets

Choose from five different fonts to create text and monograms.

Touch the "A~Z" key 1 to open the alphabet selection window.



Touch the "Font" key 2.



Select one of the fonts by touching its corresponding key.

Touch the "Return" key 3 and the font selected will be indicated.

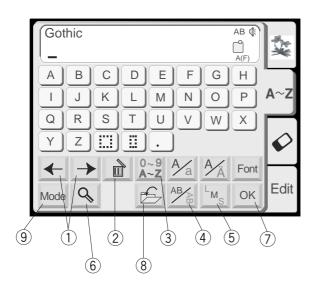


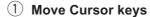
4 Diacritical Letter key

Touch this key to open/close diacritical letters. (Letters with accents, umlauts, etc.)

5 Upper/Lower Case key

Touch this key to switch between lower case and upper case lettering. See page 32.





Touch either of these keys to move the cursor (underline). The cursor location allows you to edit the text. To add a letter, number or punctuation (character), move the cursor until it is under a character. When the new character is selected it will be inserted on the left side of the cursor (underlined character). See page 34.

2 Delete key

A character can be deleted if the cursor (underline) is under it. Use the Move Cursor keys until the character to be deleted is underlined. Touch "Delete" key. See page 34.

3 Numbers/Punctuation key

Touch this key to switch between letters and numbers/punctuation keys.

4 Horizontal/Vertical key

Touch this key to switch the embroidery direction between horizontal and vertical. See page 33.

5 Alphabet Size key

Touch this key to switch between large, medium and small size lettering. This key will not be active if the font selection is 2 or 3 letters.

6 Magnifier key

Touch this key to enlarge the keys so they are easier to select. Touch the "Return" key to go back to regular sized keys.

7 OK key

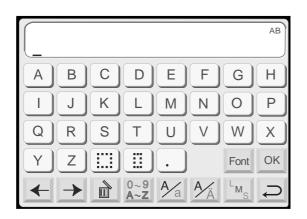
When all characters have been selected, touch this key to proceed to the ready to sew window.

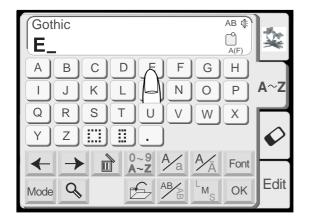
8 Save File key

Touch this key to save your selections in a file for future use. See page 42.

9 Mode key

See page 10.





Sewing Alphabets

The alphabet selection window should be open. See page 30.

Touch the "Font" key and select the Gothic style. Select "E".



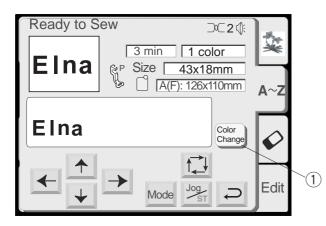
Touch the "Upper/Lower Case" key to select lower case.



Select "I", "n" and "a".

Touch the "OK" key.

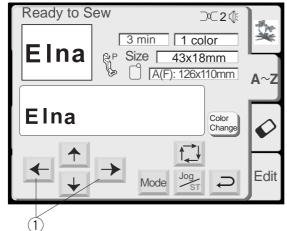
Touch the "Return" key in the hoop size warning message.



The ready to sew window will open.

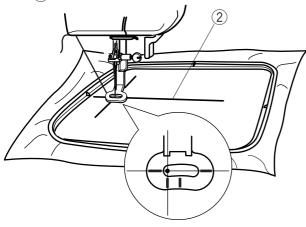
1 Color Change key

Touch this key if you want the machine to stop between each letter so that the thread color can be changed.



Hoop fabric with the centerlines located on left side. (Remember the start position for horizontal alphabets is on the left side of template. See page 23.)

Use the Jog keys ① to position hoop and align needle directly over the centerlines ②.



Lower presser foot. Press "Start/Stop" key and sew 5 or 6 stitches. Stop machine by pressing "Start/Stop" key.

Raise presser foot. Cut away beginning thread tail close to the start point. Lower presser foot.

Press the "Start/Stop" key and let the machine sew until it stops automatically.



NOTE: Vertical orientation of alphabets would sew out like illustration $\widehat{\ 3}$.



Alphabet Corrections

Deleting a letter

Example: Delete the "3" from "8300"



Touch the "Move Cursor" keys until the cursor (underline) is under the 3.





Touch the "Delete" key. The "3" is deleted.



Inserting a letter

Example: Insert "2" into 800





Touch the "Move Cursor" keys until the cursor (underline) is under the number where you want to insert the new number.





Select "2". The "2" will be inserted between the "8" and "0".





2 Letter or 3 Letter Monograms

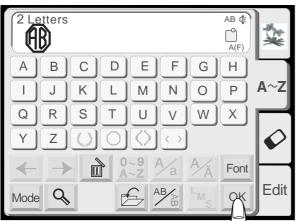
Example: 2 letters and frame for crest

The alphabet selection window should be open. See page 30.

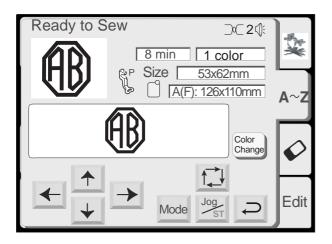
Touch the "Font" key and select "2 Letters" key.



Select one of the frames.

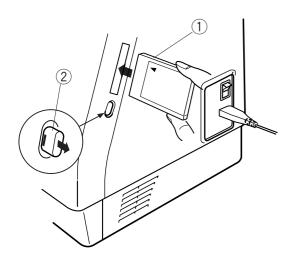


Select "A" and "B".



Touch "OK" key. Touch the "Return" key in the hoop size warning message. Sew 2 letter crest.

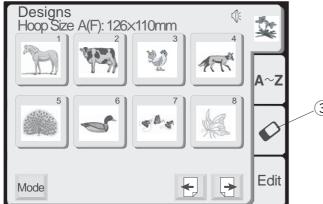
NOTE: The starting point for 2 letter and 3 letter monograms is the center of the hoop.



Sewing with PC Design Cards (Optional)

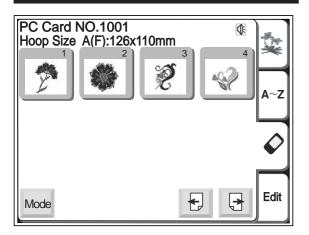
Inserting the Card

Insert PC design card ① into slot with front side facing you. Push card in until it clicks and the card eject button ② pops out. (You should see a red bar on the button.)

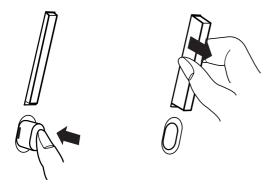


Selecting from a PC Design Card

Touch the "PC Design Card" key 3.



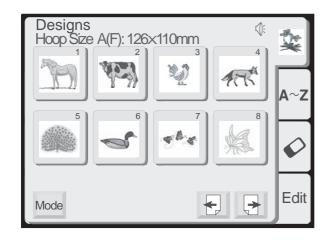
The PC design selections window opens. Designs programmed on the card will appear. Select a design.



Ejecting the Card

Push in the card eject button. Remove PC design card from the slot.

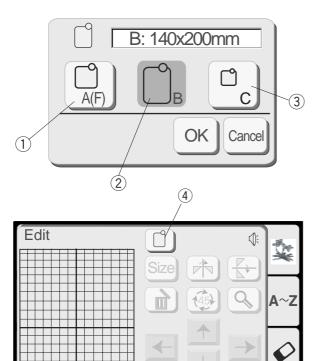
CAUTION: Do not turn off the power switch or eject the card when warning messages or hourglass icon is displayed.



Edit Window

Modify and combine designs to create your unique interpretation of them.

Touch the "Edit" key.



The hoop selection window opens. Select one of these hoops by touching its corresponding key.

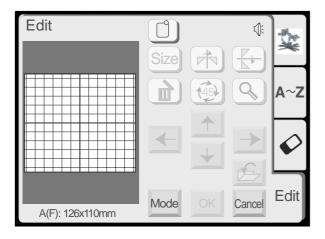
- 1) Standard Hoop A or Optional Hoop F 126 mm x 110 mm (5" x 4 3/8")
- 2 Large Hoop B 140 mm x 200 mm (5 1/2" x 8")
- (3) Optional Free Arm Hoop C 50 mm x 50 mm (2" x 2")

Touch "OK" key to open the selected hoop edit window.

NOTE: If you touch the "Cancel" key, the large hoop B edit window will open because the large hoop B is the default hoop.

NOTE: If you select a design **before** opening the edit window, touch the "Hoop Selection" key ④ and use same method as described above.

Large hoop B edit window



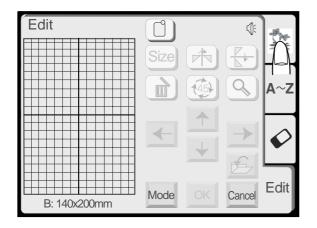
Mode

B: 140x200mm

Standard hoop A and Optional hoop F edit window

Edit

Cancel

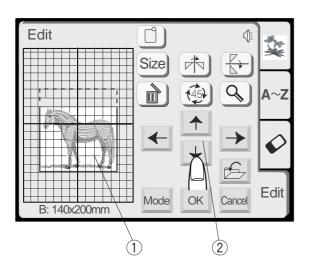


Selecting a Design After Opening the Edit Window

Open the design selection window.



Select a design.



The design will appear in the edit window with an outline surrounding it.

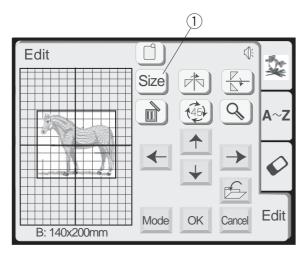
Moving a Design

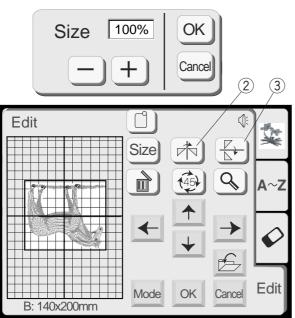
1 Touch the design on the screen and drag it to the new location with your fingertip. **NEVER** drag it with a sharp pointed object.

OR

2 Move Design keys

Use these keys to move the design to a new position. The carriage will not move (like it does with the jog keys) but instead the design moves relative to the hoop and not the machine.







Touch this key and the size adjustment window will open. Design size can be changed in 10% increments between 90% and 120% from the original size.

Touch the "–" key to decrease the design size. Touch the "+" key to increase the design size.

Touch the "OK" key and the new size of design will appear in the edit window. (If you touch the "Cancel" key, size window closes and design remains at original size.)

2 Mirror Image key

Touch this key to flip the design from left to right.

3 Face to Face key

Touch this key to flip the design from top to bottom.

4 Rotate key

Touch this key to rotate the design 45 degrees clockwise.

5 Delete key

The design that is surrounded by the outline will be deleted.

6 Magnifier key

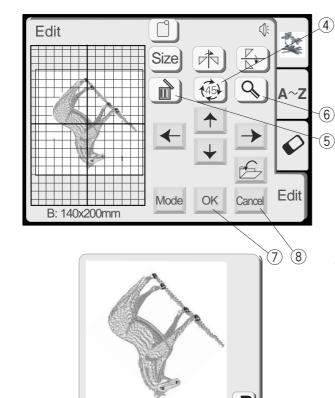
Touch this key to view the design in a larger image. Touch "Return" key to close window.

(7) OK key

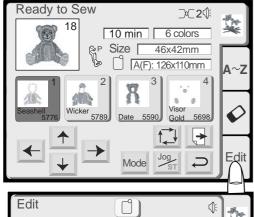
All designs are grouped together and the ready to sew window opens.

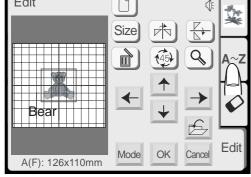
(8) Cancel Key

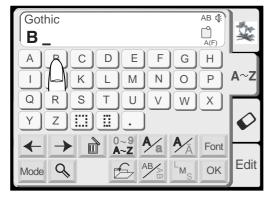
Touch this key and all designs in the edit window will be deleted and edit mode is deactivated.













Combine a Built-in Design with Alphabet

Example: Built-in design #18 and "Bear"

Select design #18 from the built-in design selection window.

Touch the "Return" key in the hoop size warning message.

Touch the "Edit" key.

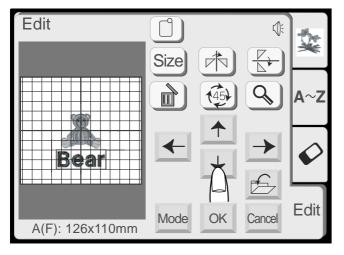
Touch the "Alphabets" key.

Select "B" (upper case in Gothic style).

Touch the "Upper/Lower Case" key to activate lower case.



Select the "e", "a" and "r". Touch the "OK" key.



Position design and text by either dragging or using the move design keys. Touch "OK" key to group everything and open the ready to sew window.

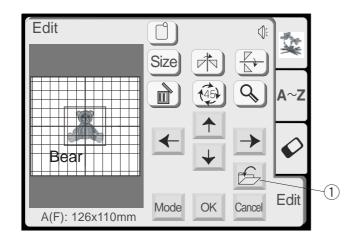
Touch the "Return" key in the hoop size warning message.



The ready to sew window opens.

Sew design.

NOTE: If you touch the "Return" key ① in the ready to sew window, edit mode is deactivated and all data is deleted.

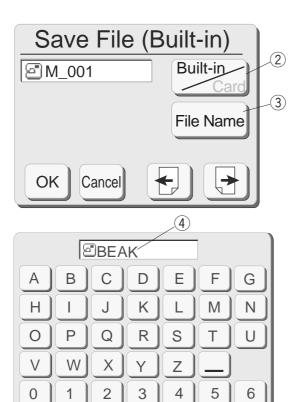


Saving a Design in a File

(Edit key must be activated)

1 Save File key

Touch this key if you want to save your unique combination so it can be used in the future.



The save file window will open.

Select the location of where the file will be saved by touching the "Built-in/Card" key 2.

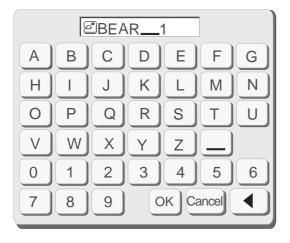
- Built-in: the file will be saved in the internal memory of the machine.
- Card: the file will be saved onto the PC card.

File names are automatically assigned in numerical order, beginning with M_001.

Touch the "File Name" key 3 to label the file with a different name.

Touch the keys (up to 8 characters) that correspond to the file name you wish to assign.

To correct the last character in the name, touch the "Backspace" key 4.

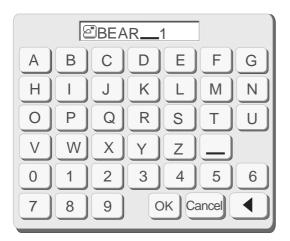


OK Cancel

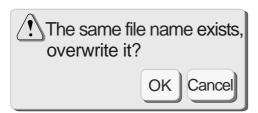
9

8

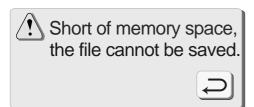
Touch the remaining keys to complete file name.



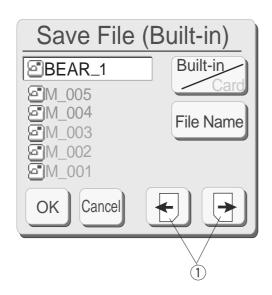
Touch the "OK" key. The file name window will close and the file will be saved with that name. (If you touch the "Cancel" key, the file name window will close without assigning the new file name.)



NOTE: Should you try to save a file under a name that already exists, this warning message will appear. Touch "OK" key to overwrite the file. Touch "Cancel" key if you don't want to overwrite the file. Change the file name and then save it under the new name.



NOTE: When the memory is full, a warning message will appear. Touch the "OK" key. Go to the open file window (see page 44) and delete a file you no longer want.

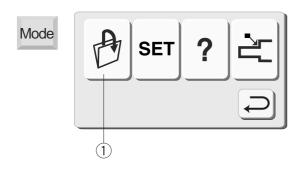


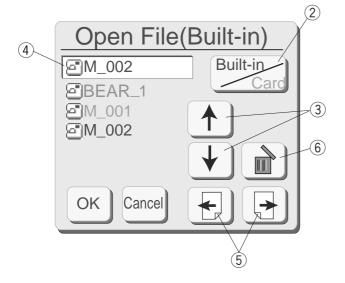
1 Next and Previous keys

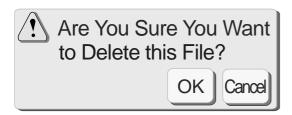
The save file window will display 5 saved file names at a time. Touch these keys to view the other saved file names.

Touch the "OK" key to save the file. Touch "Cancel" key to close the save file window without saving the file.

CAUTION: Do not turn off the power switch or eject the card when warning messages or hourglass icon is displayed. The stored data could be lost or damaged.







Opening a Saved File

You can sew any design that has been saved in a file.

Touch the "Mode" key. Touch the "Open File" key (1).

Open file window will open.

Touch the "Built-in/Card" key 2 and select the location of the file directory.

Touch the "File Up/Down" keys 3 to select the file you want to open. It will appear in the active name window 4.

The open file window will display 5 saved file names at a time. Touch the next and previous keys (5) to view the other saved file names.

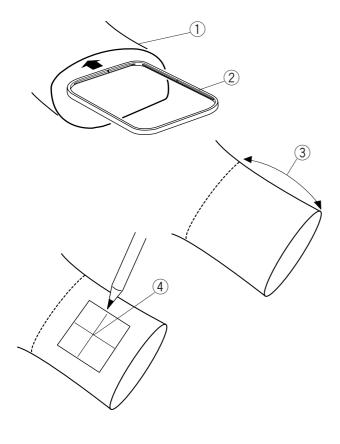
Select the file you want to sew. Touch the "OK" key. The file will appear either in the edit window or ready to sew window depending on where you accessed the open file key.

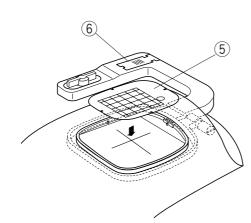
Deleting a Saved File

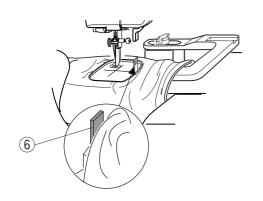
Display the file you want to delete in the active name window (4).

Touch the "Delete" key 6.

The confirmation window will open. Touch the "OK" key to delete. Touch "Cancel" key to close the confirmation window without deleting the file.







Embroiderying with Optional Free Arm Hoop C

The dimension of the leg or sleeve opening must be large enough to allow the hoop to move freely. Insert the innner hoop of large hoop B ② into the opening ①. If the inner hoop cannot be easily inserted, the opening is too narrow for free arm embroidery.

Maximum distance for design position inside the opening from the edge is 200mm (77/8") \Im . Draw centerlines \Im for design placement.

Remove extension table. See page 5.

Select hoop "C" in Edit Mode.

Select design or letters (dimensions or design/letters must be 49mm or less).

NOTE: Built-in designs less than 49mm are 3, 9, 18, 20, 21, 22, 23, 24, 29, 30, 34, 35, 36 and 44.

Hoop fabric, aligning centerlines ④ with hoop template ⑤ .

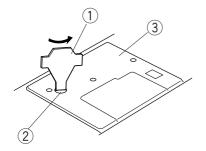
Place fabric around free arm and lock hoop onto carriage. Roll up fabric edges so it will not be caught at the neck of the free arm during embroidery sewing.

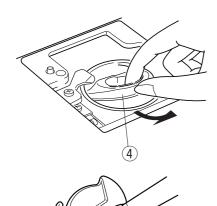
Insert the blocking plate (stored in the arm of the hoop) (6) next to the hoop opening. The blocking plate prevents the fabric edge on the free arm from rolling back into the embroidery area.

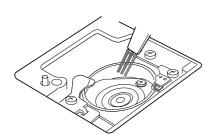
Touch the "Jog" keys to position needle directly over centerline.

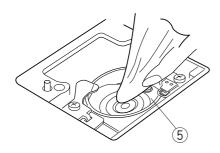
Sew design.

CAUTION: Immediately remove hoop from free arm after sewing is completed. Never atempt to select a new design, change modes or switch off machine without first removing the hoop from the arm.









Taking Care of Your Machine

The machine is self-lubricating, however, the area around the bobbin and hook must be cleaned each time the machine has had extensive use. **Do not dismantle the machine further than explained on these pages**. Clean the outside of the machine with a soft cloth and pure soap.

Cleaning the Hook Area

Loose threads and dust may cause puckered stitches and thread breakage during stitching. Check for lint buildup after each project is completed.

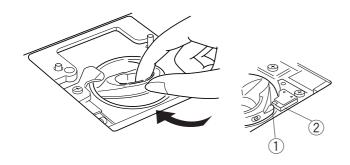
Hand turn the flywheel to raise the needle to its highest position. Turn **Off** power switch. **Unplug** the machine before cleaning.

Remove the needle. Use the screw key ① supplied with the machine to remove the screw ②. Lift away the needle plate ③.

Take out the bobbin. Lift up and remove the bobbin case $\widehat{(4)}$.

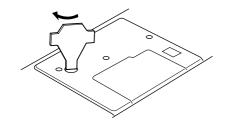
Clean the bobbin case with the lint brush and soft, dry cloth.

Clean the hook area 5 with the lint brush. Wipe out gently with soft, dry cloth. (You can also use a small vacuum cleaner.)



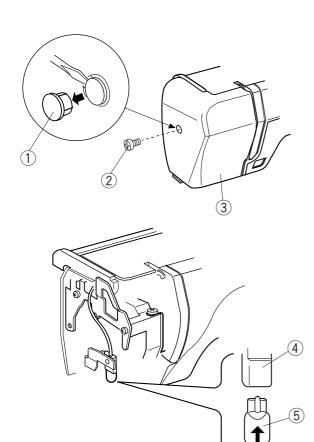
Replacing the Bobbin Case

Insert the bobbin case so the knob ① fits next to the stopper ② in the hook area.



Attach the needle plate and tighten the screw.

After cleaning, be sure to replace the needle, presser foot and bobbin.



Changing the Light Bulb

Turn **OFF** the power switch. **Unplug** the machine. Wait until the bulb has cooled before touching it.

Remove screw cap ① and set screw ②. Pull away face plate ③.

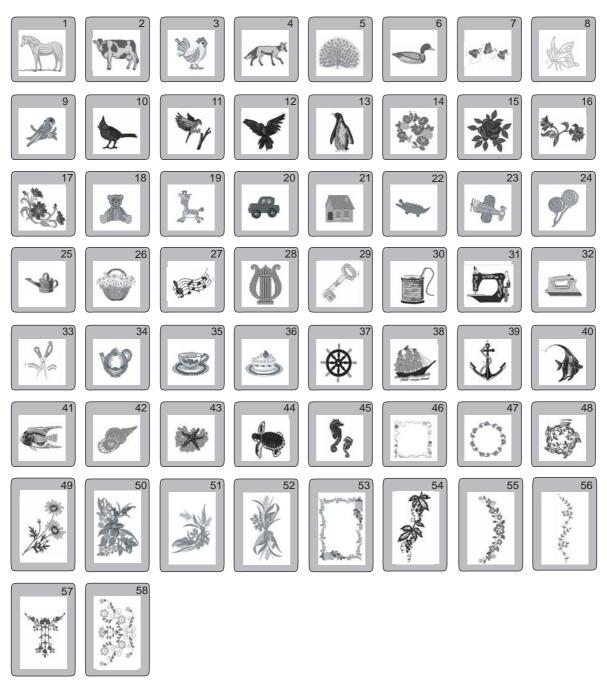
Pull out light bulb 5 from the socket 4.

Insert light bulb into light socket.
Replace face plate, screw and screw cap.

NOTE: Only use same type light bulb rated 12 Volts, 5 watts.

STITCH CHART

Built-in designs



Gothic

[A][B][C][D][E][F][G][H][I][J][K][L][M][N] $[\mathbf{O}][\mathbf{P}][\mathbf{Q}][\mathbf{R}][\mathbf{S}][\mathbf{T}][\mathbf{U}][\mathbf{V}][\mathbf{W}][\mathbf{X}][\mathbf{Y}][\mathbf{Z}][\square][\square][\square]$ a b c d e f g h i i k I m n $o || p || q || r || s || t || u || v || w || x || y || z || \square || \square || \ldots |$ [0][1][2][3][4][5][6][7][8][9][&][_][\$][@] [.](·](,](?](¿)(!)(i)(')(')(<)(ÄÂÁÀÃÅËÊÉÈÏÎÍÌÑ [Ö||Ô||Ó||Ŏ||Ŏ||Ŭ||Û||Ú||Ú||Œ||U||Œ||Ç||Ø||ß [ö || ô || ó || ò || õ || ŭ || û || ú || û || æ|| ij || œ|| Ç || Ø || ß

Script

 $[\mathcal{A}][\mathcal{B}][\mathcal{C}][\mathcal{D}][\mathcal{E}][\mathcal{F}][\mathcal{G}][\mathcal{H}][\mathcal{I}][\mathcal{I}][\mathcal{K}][\mathcal{L}][\mathcal{M}][\mathcal{N}]$ $\| \mathscr{O} \| \mathscr{F} \| \mathscr{Q} \| \mathscr{R} \| \mathscr{S} \| \mathscr{S} \| \mathscr{S} \| \mathscr{U} \| \mathscr{V} \| \mathscr{W} \| \mathscr{X} \| \mathscr{Y} \| \mathscr{Z} \| \square \| \square \| \ldots \|$ a | (b) | c | (d) | e | (f) | g | (h) | i | (j) | k | (l) | m | (n) $a \parallel p \parallel q \parallel r \parallel s \parallel t \parallel u \parallel u \parallel u \parallel x \parallel y \parallel z \parallel \square \parallel \square \parallel$. || • || • || ? || 6 || ! || i || • || • || > || $\| (\ddot{o} \parallel \hat{o} \parallel \acute{o} \parallel \acute{o} \parallel \ddot{o} \parallel \ddot{o} \parallel \ddot{u} \parallel \acute{u} \parallel \acute{u} \parallel \acute{u} \parallel \ddot{u} \parallel \mathcal{A} \parallel \mathcal{A}$ $(\ddot{a})(\hat{a})(\hat{a})(\hat{a})(\tilde{a})(\tilde{a})(\tilde{a})(\tilde{a})(\hat{a$

Cheltenham

 $(\mathbf{A})(\mathbf{B})(\mathbf{C})(\mathbf{D})(\mathbf{E})(\mathbf{F})(\mathbf{G})(\mathbf{H})(\mathbf{I})(\mathbf{J})(\mathbf{K})(\mathbf{L})(\mathbf{M})(\mathbf{N})$ $(\mathbf{O})(\mathbf{P})(\mathbf{Q})(\mathbf{R})(\mathbf{S})(\mathbf{T})(\mathbf{U})(\mathbf{V})(\mathbf{W})(\mathbf{X})(\mathbf{Y})(\mathbf{Z})(\square)(\square)$ $\mathbf{a} \mathbf{b} \mathbf{c} \mathbf{d} \mathbf{e} \mathbf{f} \mathbf{g} \mathbf{h} \mathbf{i} \mathbf{j} \mathbf{k} \mathbf{l} \mathbf{m} \mathbf{n}$ $lackbox{0} lackbox{p} lackbox{q} lackbox{r} lackbox{s} lackbox{t} lackbox{u} lackbox{v} lackbox{v} lackbox{w} lackbox{v} lackbox{y} lackbox{v} lackbox{y} lackbox{v} lac$ 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | & | - | \$ | @ | [.](•)(,)(?)(¿)(!)(i)(')(')(<)(>)(□)(ー)[□ [Ö||Ô||Ó||Ò||Ŏ||Ŭ||Û||Ú||Ŭ||Æ||IJ||Œ||Ç||Ø||B] $[\ddot{\mathbf{a}}][\ddot{\mathbf{a}}][\ddot{\mathbf{a}}][\ddot{\mathbf{a}}][\ddot{\mathbf{a}}][\ddot{\mathbf{a}}][\ddot{\mathbf{e}}][\ddot{\mathbf{e}}][\ddot{\mathbf{e}}][\ddot{\mathbf{e}}][\ddot{\mathbf{e}}][\ddot{\mathbf{i}}][$ Ö Ô Ó Ò Õ Ü Û Û Û æ ij œ Ç Ø B

3-letters / 2-letters

















TROUBLE SHOOTING

Condition	Cause	See page (s)
Needle thread breaks	 The needle is not threaded properly. The needle thread tension is too tight. The needle is bent or blunt. The needle is not inserted correctly. The needle thread and bobbin thread are not set in the thread holder before sewing starts. 	18 6 21 21 20
Bobbin thread breaks	 The bobbin thread is not threaded correctly in the bobbin case. Lint has collected in the bobbin case. The bobbin is damaged and does not turn smoothly. 	17 46-47 Change bobbin
Needle breaks	 The needle is not inserted correctly. The needle is bent or blunt. The needle clamp screw is loose. The needle thread tension is too tight. 	21 21 21 6
Skipped stitches	 The needle is not inserted correctly. The needle is bent or blunt. The needle thread is not threaded properly. The hoop is not attached correctly to the carriage. Fabric is not taut in the hoop. Stabilizer is not being used. 	21 21 18 25 24 22
Designs are distorted	 Fabric is not taut in the hoop. The hoop is not attached correctly to the carriage. The carriage is hitting into something around the machine. Fabric is caught or pulled by something during sewing. The needle thread tension is too tight. Stabilizer is not being used. The thread on the underside of fabric is not cut correctly. 	24 25 8 Free up fabric 6 22 Cut thread
Machine does not work	1. The machine is not plugged in. 2. A thread is caught in the hook area. 3. The control circuit is not working correctly.	7 46-47 Turn machine off and on
Abnormal noise when machine is turned on	 Something is caught between the carriage and arm. The carriage is touching something around the machine. 	Remove object
LCD Touch Screen is not visible	Screen contrast is not adjusted correctly. Machine has not been used for a time and enters eco mode.	11 11
Noisy operation	Threads have been caught in the hook area. Lint has built up in the bobbin case or hook area.	46-47 46-47
Selection keys don't work	Keys are not aligned correctly. The control circuit is not working correctly.	12 Turn machine off and on

INDEX	I lack Managements
A	Inch Measurements
Accessories 4	Index Window
Accessory Storage 5	Inner Hoop 22, 24
Adjust Key Positions	
Alphabet Selection Window	
Alphabet Size Key	J
Alphabets	Jog keys
/ ipriaboto	Jog/ST Key 29
В	
Backspace Key	K
Bobbin	Keys 9-14, 26-27, 29-32, 38-39, 44
Drawing Up Bobbin Thread	
Inserting the Bobbin	L
	LCD Screen Contrast 11
Winding a Bobbin	LCD Touch Screen 3, 9, 11
Bobbin Case	Language Selection
Built-in Designs	Letters/Numbers
•	Light Bulb 1, 47
C Connect Key	
Cancel Key	M
Card Eject Button	Magnifier Key 31, 39
Card Slot	Maintenance 46-47
Carriage 3, 8, 25	Memory Bank
Centerlines	Mirror Image Key
Centimeter Measurements 11	
Changing Needles	Mode Key
Cleaning	Mode Selection Window
Color Change Key	Monograms
Color/Part Key	Move Cursor Keys 31
Combining Designs	Move Design Keys 38
Connecting Machine to Power Supply	Moving Designs
Correcting Alphabets	N
Cutting Threads	Needle Plate 1, 3, 46-47
_	Needle Position
D	Needle Threader 3, 19
Delete Key 31, 39	Needles
Deleting a Saved File 44	Next key
Design Chart	Numbers/Letters
Diacritical Letter Key	Numbers/Punctuation Key
	Numbers/1 unduation key
E	0
Eco Mode 11	OK Key 31
Edit	
	On Screen Information key
F	Open File key
Fabric	Outer Hoop
Face Plate	Overwriting Saved File
Face to Face Key	
Factory Default Settings	P
File Names	PC Design Card 3, 13, 36
	PC Design Card Slot
File Up/Down Keys	Part Names
Files	Plugs 1, 3, 7
Saving, Overwriting, Recalling and Deleting 10, 42-44	Power/Light Switch
Flywheel 3, 18	Presser Foot
Font Key 30	Presser Foot Lever
Format	
Free Arm 5, 45	Previous Key
Function Keys 9-14, 26-27, 29-32, 38-39, 44	D
	R Boody to Conv. Window
Н	Ready to Sew Window
Hook Area	Recalling Saved File
Hoop Selection Window	Register Key 11, 13
Hoop Tightening Screw	Reset to Factory Defaults
Hoop Turn key	Return Carriage Key 10, 29
Hoops	
Horizontal/Vertical Key	

Return Key	
S	
Save File Key 31,	42
Saving a File42	-43
Screen Contrast	
SET Preference Key10, 11-	-13
Sewing Light 12,	
Size Key	
Size of Design - Dimensions	
Skipping	
Small Area – Embroidery	
Sound	
Speed	
Spool Pins	
Stabilizers	
Start/Stop Key	
Stitch Minus/Plus Keys	29
-	
Townslate Chapte	20
Template Sheets 4, Templates 23,	
Thread	
Thread Breaks	
Thread Cutting	
Thread Holder	
Thread Tension	
Threading	
Time	
Trace Key	
Tidoo Roy	
U	
Upper/Lower Case Key	30
V	
Vertical Orientation	33
w	
Window catagory	(